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Rhodora

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JOURNAL OF

THE NEW ENGLAND BOTANICAL CLUB

Vol. 33. June, 1931. No. 390.

AN OVERLOOKED SPECIES OF CORAL-ROOT FROM THE ROCKY MOUNTAINS

C. E. Hellmayr and K. J. Hellmayr

Through the kind coöperation of Dr. Aven Nelson we were enabled to visit, in the summer of 1929, the Medicine Bow Range, Wyoming. On one of our excursions in search of orchids we came across several scattered colonies of a Coral-root which we immediately recognized as different from any other species known to us. Studies in the Rocky Mountain Herbarium of the University of Wyoming (Laramie) revealed the fact that the plant had heretofore been referred to the European *Corallorrhiza trifida* Chat., a species with which we are thoroughly familiar in nature and which we had collected in large numbers the year before in Germany and Switzerland.[1] Prof. T. D. A. Cockerell[2] apparently was the first to notice its distinctness from the Old World plant, but in the absence of European material, he had to rely on published descriptions, and provisionally separated the Colorado form as a subspecies under the name *C. corallorhiza coloradensis*. The differences between the two plants are, however, such as to suggest specific distinctness.

The Rocky Mountain plant may, accordingly, be described as:

Corallorrhiza **wyomingensis**, n. sp., caulibus gracilibus 10–16 cm. altis, infra medium 2 vel rare 3 bracteis vaginantibus onustis; floribus in racemum laxum 9–12-florum dispositis; bracteis minutis triangularibus obtusis; ovario pedicellato torto perianthio erecto longiore; planta tota pallide lutea, floribus laete luteis, labello albo; sepalis lateralibus lineari-lanceolatis plus minusve patentibus et juxta labellum deflexis, 6–7 mm. longis; sepalis superioribus brevioribus latioribusque supra columnam productis; petalis breviter subacutis vel obtusis ca. 5 mm. longis et 1.5 mm. latis sepalis superioribus paullo brevioribus; labello late oblongo basi angustato apice truncato, parte apicali deflexa et undulato-marginata; lobis lateralibus minutis dentiformibus; calcare obsoleto vel obscuro; columna longiuscula et gracili prope medium attenuata prorsum valde curvata; clinandrio leviter scrobiculiformi minuto.

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[1] This summer (1930) we again had an opportunity of studying numerous fresh plants in the Bavarian Alps.

[2] Torreya, xvi, 1916, p. 231.

Stem slender, 10 to 16 cm. high with two, rarely three, sheathing scales on basal half; flowering spike a loose raceme of from 9 to 16 flowers; bracts minute, triangular, obtuse; ovary pedicelled, twisted, longer than the erect perianth; whole plant light yellow, flowers brighter, the lip pure white; lateral sepals linear-lanceolate, somewhat spreading and deflected at sides of lip, 6 to 7 mm. long; upper sepals shorter and broader, roofing over the column; petals briefly subacute or obtuse, about 5 mm. long and 1.5 mm. wide, slightly shorter than upper sepals; lip broad-oblong, narrowed at base, truncate at tip, with apical half deflexed and wavy-edged; lateral lobes exceedingly small, tooth-like; no trace of a spur, at best suggested by a faint swelling; column fairly long and slender, attenuated in the middle, strongly bent forward; clinandrium a small, slight depression.

TYPE from Libby Creek (alt. 7000 ft.), near Libby Lodge, Medicine Bow Range, Wyoming, July 17, 1929 (*C. E. and K. J. Hellmayr*, No. 72).

Geographical Distribution.—Rocky Mountains, WYOMING: Libby Creek, near Libby Lodge (*C. E. and K. J. Hellmayr*, July 17, 1929); Jackson Creek (July 7; Rocky Mountain Herbarium, University of Wyoming); Horse Creek, seven miles west of Merna, Sublette County (July 16, 1922; Rocky Mountain Herbarium).

C. wyomingensis is nearly related to *Corallorrhiza trifida;* but the flowers are markedly larger, the column is slenderer and more strongly curved, and the lateral lobes of the lip, so conspicuous in its ally, are barely suggested. Besides, the coloration is quite different, the entire plant being light yellow, with the wholly unmarked lip in abrupt contrast pure white. *Corallorrhiza trifida* is purplish or brownish green, the sepals and petals are tipped with purplish, and the trilobed lip is dotted or streaked with bright purple, this color also encroaching on the top of the column. Twenty-five specimens of *C. wyomingensis* examined on the spot were perfectly alike in coloring and did not show any variation. In the majority, there was no trace of a spur, though a very slight swelling was noticeable in a few plants. The plants were found growing in small colonies among moss and lichens on the very edge of the creek in shady woods.

There is little doubt that the plant described by Cockerell from near

Long's Peak Inn, Larimer County, Colorado, is specifically identical with *C. wyomingensis*, though certain peculiarities, such as the pale orange-tinted sepals and the whitish (not pure white) lip, seem to indicate that *coloradensis* might be separable as a variety. On the other hand, it is quite possible that *C. innata* var. *virescens* Farr,[1] based on specimens from Banff, Alberta, and Field, British Columbia, may be referable to *C. wyomingensis*.

It may be well to consider in this connection the possible relationship of our plant to *C. vancouveriana* Finet,[2] regarded by Prof. Oakes Ames[3] as synonymous with *C. trifida*. Thanks to the courtesy of Prof. Lecomte and his associates, we were enabled, this summer, to examine the type sheet and Finet's original drawings in the Herbarium of the Muséum d'Histoire Naturelle, at Paris. While the two specimens on the sheet are not in very good condition, two of the five flowers of the larger plant are fully developed, and permit a close scrutiny of their structure. As correctly described by Finet, the plant possesses a *very conspicuous exposed* spur; besides, the lateral lobes of the lip are much larger and much more divaricate, and its margin is much less crenulate than in *C. trifida*. There can be no doubt that *C. vancouveriana* is totally different from both *C. trifida* and *C. wyomingensis*. On the other hand, it is so close to certain Mexican species that one is tempted to question the correctness of the locality. The sheet was presented by Sir W. Hooker, in 1855, and the original label reads: "I. Vancouver. Garry, May, 1826."

To Dr. Paul Standley we are much indebted for looking over the manuscript and for supplying the Latin diagnosis.

Fields Museum of Natural History,
Chicago.

CLADONIAS COLLECTED BY S. F. BLAKE IN THE WESTERN UNITED STATES[4]

C. A. Robbins

(Plate 209)

During the summer of 1927 Dr. S. F. Blake collected Cladonias from several localities[5] in the Pacific Coast States and also from three stations in Yellowstone Park, Wyoming. Aside from adding to our knowledge of the distribution of a number of plants which are commonly met with in New England, these collections brought to light one new species and two new forms, as well as some plants not previously reported from North America. It seems advisable, therefore, to record all the species and forms found.

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[1] Contrib. Bot. Lab. Univ. Penns., 2, 1904, p. 425.

[2] Bull. Soc. Bot. France, 56, 1909, p. 100, pl. 1, figs. 38–43.

[3] An Enumeration of the Orchids of the United States and Canada, 1924, p. 24.

[4] Mr. C. A. Robbins died on 22 Jan. 1930. This paper was left by him so nearly complete that it has been possible to prepare it for publication without material

The species are arranged as far as possible after the order of Wainio's" Monographia Cladoniarum Universalis" and his "Lichenographia Fennica." A few departures from these works will be noted, particularly in the splitting up of *Cladonia fimbriata,* and in the treatment of certain other species where the classifications of Harmand or Sandstede seem preferable.

1. Cladonia sylvatica (L.) Hoffm. Wyoming: Canyon Junction, alt. 2375 m.; Upper Geyser Basin, alt. 2240 m.

2. C. tenuis (Floerke) Harm. Wyoming: Upper Geyser Basin, alt. 2240 m.

3. C. bacillaris (Ach.) Nyl. f. subscyphifera Wain. California: Inverness. Not before recorded from America.

4. C. macilenta (Hoffm.) Nyl. f. corticata Wain. Washington: on stump in prairie, Tumwater (sturdy plants, often much branched, the majority too sorediate and intermediate with f. *styracella* (Ach.) Wain.). Previously reported in North America from Connecticut and South Carolina. Also slender, simple plants likewise intermediate between these two forms from redwood stump, La Honda Canyon, and sand dunes, Del Monte, California.

5. C. digitata Schaer. California: Del Monte (thallus).

6. C. deformis Hoffm. m. extensa (Hoffm.) Wain. Wyoming: Upper Geyser Basin. Also f. crenulata (Ach.) Nyl. from the same locality.

7. C. furcata (Huds.) Schrad. var. pinnata (Floerke) Wain.

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change except for corrections in four specific names. Dr. Alexander W. Evans informs me that three of these, discussed in his recent paper on "The Cladoniae of Connecticut" (Trans. Conn. Acad. **30**: 357–510. 1930), had been agreed to by Mr. Robbins in correspondence. The fourth name (*C. Balfourii*) has priority over the name used by Mr. Robbins in reporting on my specimens. The statements of range extension have been kindly checked by Dr. Evans. A presumably full set of the species and forms recorded, including the types of those described as new, is in the herbarium of Mr. Robbins, which has been given by his widow to the Farlow Herbarium. Another set, containing a complete representation of the localities listed for each species and form, was returned by Mr. Robbins for my own herbarium.—S. F. Blake.

[5] The localities at which specimens were collected are: California: Santa Rosa, Sonoma County; Inverness, Larkspur, and Mt. Tamalpais, Marin County; La Honda Canyon and Santa Cruz Mountains, San Mateo County; Palo Alto, Santa Clara County; Del Monte, Monterey County; Camp Curry, Yosemite National Park, Yosemite County; Fallen Leaf Lake, Eldorado County. Oregon: Wolfcreek, Josephine County. Washington: Tumwater, Thurston County. Wyoming: Mammoth Hot Springs, Upper Geyser Basin, and Canyon Junction, all in Yellowstone National Park.

f. TRUNCATA (Floerke) Wain. CALIFORNIA: Inverness, and on sand dunes, Del Monte.

8. C. SCABRIUSCULA (Del.) Leight. f. **surrecta** (Floerke) Sandst. (*Cladonia furcata* var. *racemosa* f. *surrecta* Floerke, Clad. Comm. 154. 1828). CALIFORNIA: Larkspur and Inverness.—Forma **subnuda** Robbins, forma nova: cortex none, podetia becoming subpellucid, often darkened, smooth or with scattered to contiguous, minute, scale-like, persistent squamules. CALIFORNIA: Santa Cruz Mountains, San Mateo County. (PLATE 209, F. 3.)—And from tufa near Santa Rosa, CALIFORNIA, plants atypical as to form, rather dark and quite squamulose, approaching f. **conspersa** (Wain.) Sandst., n. comb. in litt. (*Cladonia furcata* f. *conspersa* Wain. Act. Soc. Faun. Fl. Fenn. **4** (Monog. Clad. **1**): 355. 1887).

9. C. MULTIFORMIS Merrill f. FINKII (Wain.) Evans and f. SUBASCYPHA (Vain.) Evans. OREGON: near Wolfcreek.

10. C. SUBSQUAMOSA (Nyl.) Wain. WASHINGTON: on stump in prairie, Tumwater (plants variously intermediate between f. *denudata* Arn. and f. *pulverulenta* (R. Br.) Wain.).

11. C. CENOTEA (Ach.) Schaer. f. CROSSOTA (Ach.) Nyl. WYOMING: Upper Geyser Basin (a rather undeveloped state).

12. C. CARIOSA (Ach.) Spreng. WYOMING: Mammoth Hot Springs. CALIFORNIA: on rocks, Camp Curry, alt. 1220 m. (thallus only from both stations).

13. C. ELONGATA (Jacq.) Hoffm. f. ECMOCYNA (Ach.) Vain. and f. LAONTERA (Del.) Vain. (the last beautifully and very diversely developed). WYOMING: Canyon Junction, alt. 2375 m.—Also, from the same locality, forma **intermedia** Robbins, forma nova; podetia moderately short (12–50 mm. tall), squamulose throughout, cup-forming, the cups well expanded. (PLATE 209, F. 1.) Analogous to *C. gracilis* f. *dilacerata*.

14. C. DEGENERANS (Floerke) Spreng. f. EUPHOREA (Ach.) Floerke. WYOMING: Canyon Junction.—Forma CLADOMORPHA (Ach.) Wain. CALIFORNIA: Santa Cruz Mountains.—Forma PHYLLOPHORA (Ehrh.) Flot. WYOMING: Canyon Junction and Upper Geyser Basin; CALIFORNIA: Santa Cruz Mountains.

15. C. VERTICILLATA (Hoffm.) Schaer. f. EVOLUTA (Th. Fr.) Stein and f. PHYLLOCEPHALA (Flot.) Oliv. CALIFORNIA: from tufa near Santa Rosa, and from Santa Cruz Mountains.—Also, from the last station, f. APOTICTA (Ach.) Wain.—Forma CERVICORNIS (Ach.) Floerke. WYOMING: Upper Geyser Basin (thallus; also plants with the podetia well developed and squamulose).

16. C. KREMPELHUBERI Vain. CALIFORNIA: near Fallen Leaf Lake (thallus). Not previously reported from North America.

17. C. MACROPHYLLODES Nyl. WYOMING: Upper Geyser Basin, alt. 2240 m. (thallus; det. Sandstede). Not previously reported from North America.

18. C. CHLOROPHAEA (Floerke) Spreng. f. COSTATA (Floerke) Arn.

California: Inverness and Larkspur. Washington: on stump in prairie, Tumwater.—Also, from the last station, f. PROLIFERA (Wallr.) Arn.; and f. SOREDIOSA Sandst. from Inverness.—Plants atypical as to form from Oregon: near Wolfcreek; Wyoming: Upper Geyser Basin; California: from tufa, near Santa Rosa; Camp Curry; Santa Cruz Mountains; and from sand dunes, Del Monte,[1] the last a quite unusual colony, apparently of new plants but really the proliferations from the podetial or cup squamules of a buried and decaying preceding rank, widely divergent in development.

19. C. CONISTA (Ach.) Robbins; A. F. Allen, Rhodora **32**: 92. 1930. (*Cenomyce fimbriata* β. *C. conista* Ach. Syn. Lich. 257. 1814.) California: among redwoods, Larkspur, and on sand dunes, Del Monte. Doubtless intermediate between *C. fimbriata* and *C. chlorophaea* (see Wainio, Monog. Clad. **2**: 266), but possessing characters which may well be considered specific. Podetia short and with cups well expanded as in *chlorophaea*, but the soredia finely farinaceous as in *fimbriata;* usually more corticate than either, with comparatively large, persistent primary squamules. Widely distributed.

20. C. MAJOR (Hag.) Sandst.[2] California: on rocks, Camp Curry, alt. 1220 m.

21. C. FIMBRIATA (L.) Fr.[2] Oregon: near Wolfcreek.

22. C. NEMOXYNA (Ach.) Nyl. California: Mount Tamalpais, alt. 550 m.; Wyoming: Upper Geyser Basin, alt. 2240 m.

23. C. Balfourii Cromb. (*C. fimbriata* ζ^3 *Balfourii* (Cromb.) Wain.). California: on dry rocks, Palo Alto. With it: forma **subradiata** (Wain.) Robbins, n. comb. (*C. fimbriata* ζ *chondroidea* Wain. ζ^2 *subradiata* Wain. Act. Soc. Faun. Fl. Fenn. **10** (Monog. Clad. **2**): 338. 1894).—The species has been recorded by Wainio from the White Mountains (*Tuckerman*), the forma not hitherto from North America. [In the case of this species and form I have retained Mr. Robbins' identifications but corrected the names used by him to agree with the law of priority. S. F. B.]

24. C. CONIOCRAEA (Floerke) Spreng. In various states, from California: Inverness and Camp Curry; Oregon: near Wolfcreek.—Also f. PHYLLOSTROTA (Floerke) Vain., from California: Mt. Tamalpais; and both f. CERATODES (Floerke) Dalla Torre & Sarnth. and f. TRUNCATA (Floerke) Dalla Torre & Sarnth. from the following localities: California: Larkspur, Inverness, and Santa Cruz Mountains; Wyoming: Upper Geyser Basin.

25. C. PITYREA (Floerke) Fr. var. Zwackhii Wain. f. SUBACUTA Wain. California: on dry rocks, Palo Alto.

26. C. CARNEOLA Fr. Wyoming: Upper Geyser Basin. Also f. SIMPLEX Flot. and f. PROLIFERA Flot. from the same locality.

27. C. **Blakei** Robbins, sp. nov.; primary squamules medium-size, the margins entire or irregularly lobed, yellowish above, white be-

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[1] Distributed in Sandstede's Clad. Exsicc. as no. 1883.

[2] The usage of Evans, Trans. Conn. Acad. **30**: 474. 1930, is here followed.—S. F. B.

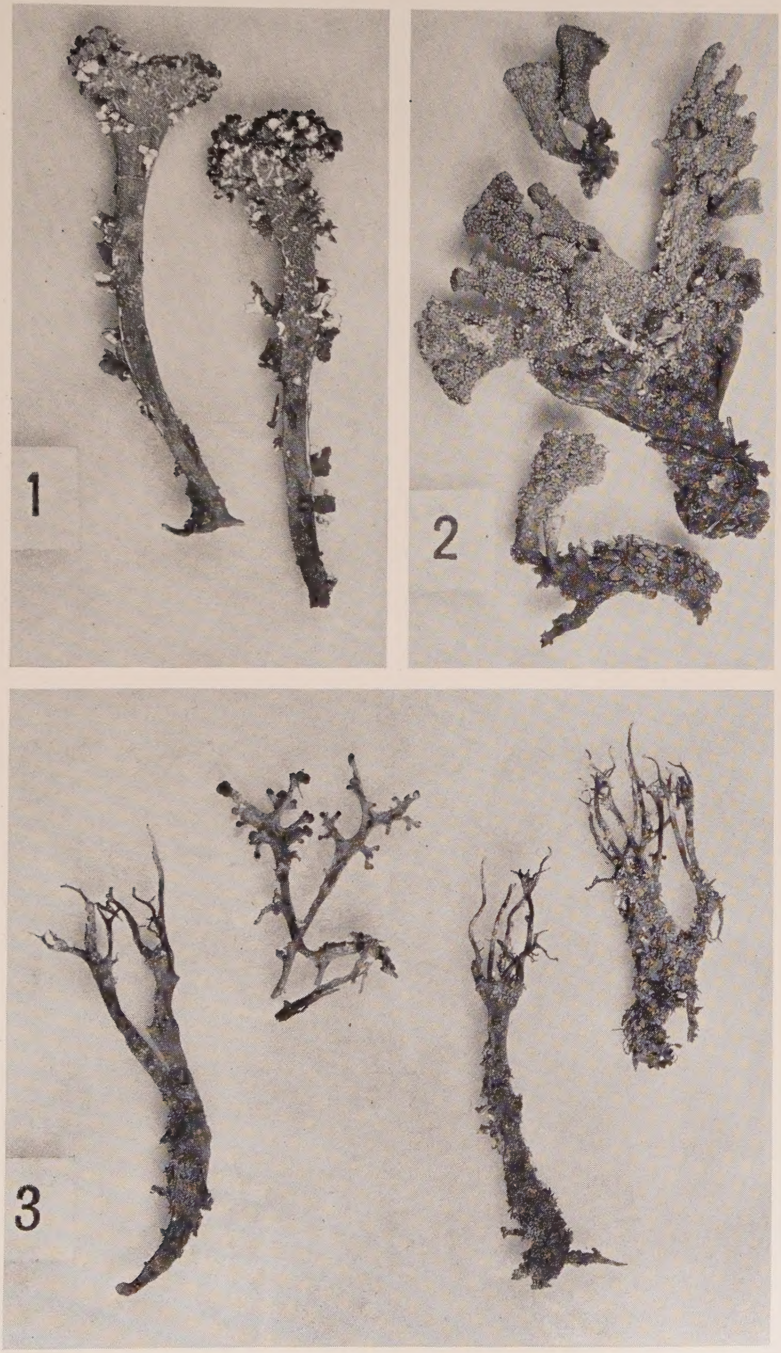

Fig. 1, Cladonia elongata f. intermedia; fig. 2, C. Blakei; fig. 3, C. scabriuscula f. subnuda; all × 2.

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neath (or darkening in age), neither sorediate nor granulose, KOH — , CaCl—, (or in combination—); podetia short, stout, cup-forming, cups regular or irregular, imperforate, moderately deep, becoming much expanded (to 14.5 mm. in diameter), the margins entire or repeatedly proliferate, the proliferations one to several, cup-forming or somewhat club-shaped; cortex yellowish, continuous or subcontinuous, smooth or slightly rugose, persistent and *densely covered with small, smooth, subglobose, yellowish squamules*, KOH—, CaCl— (or in combination —); apothecia brown. (PLATE 209, F. 2.) –Type from Upper Geyser Basin, Yellowstone Park, WYOMING, alt. 2240 m., September 6, 1927.—The species is *pyxidata*-like in construction but is distinctly yellow and perhaps not far from *C. carneola* Fr. In the globose-squamulose-covered cortex it resembles *C. santensis* Tuck.

EXPLANATION OF PLATE 209.

Fig. 1. *Cladonia elongata* f. *intermedia.* Fig. 2. *C. Blakei.* Fig. 3. *C. scabriuscula* f. *subnuda.* All × 2, from the types in herbarium of C. A. Robbins.

RECENT CONTRIBUTIONS TO THE FLORA OF WISCONSIN

ALVIN L. THRONE

THE first specimen of *Pterospora andromedea* Nutt. to be recorded from Wisconsin was found by the writer August 14, 1928, while collecting specimens for the herbarium of the State Teachers College of Milwaukee. The specimen was found in the extreme southeastern corner of Ozaukee County, on a rather heavily wooded bluff near Lake Michigan, in the locality known as Donges Bay.

This region is only twelve miles from the heart of Milwaukee but due to the area being dissected by several deep ravines, and because of its scenic beauty, it has been left in its natural state. The soil is a stiff, reddish clay. The dominant tree growth is white pine (*Pinus Strobus* L.) this being one of the few places in southeastern Wisconsin where the species is still found in any number. The specimen of *Pterospora* was found on top of a bluff in a somewhat grassy area (*Poa pratensis* L.) about fifteen feet from the base of a white pine. The region was thoroughly searched and another specimen was found about a fourth of a mile in distance from the first. It was growing on the slope of the ravine in hard clay soil which was covered with a carpet of dead pine needles. The only undergrowth was a few bushes of *Juniperus communis* var. *depressa* Pursh. This specimen is herbarium number 66162 of the Milwaukee Public Museum. The roots of *Pterospora* were found to greatly resemble those of the Beech-drops

Epifagus virginiana (L.) Bart. No direct connection with the roots of the pine was found.

In 1929 three specimens were found. In 1930, one specimen was found in the same locality, but in the very northeastern corner of Milwaukee County. No judgement can be made at this time as to whether the species is indigenous to Wisconsin or whether it is a recent, accidental introduction, but the above observations indicate that the species is fairly well established in this locality.

Another plant, *Amesia latifolia* (Huds.) Nelson & Macbride, new to the Wisconsin flora, was found by the writer July 24, 1930, and is now in the Milwaukee Public Museum, herbarium number 70396. The specimen was found on the north side of a ravine in Lake Park within the city limits of Milwaukee. Lake Park is one of the largest and oldest parks in the city. Within its boundaries are four ravines, the sides of which are covered with the native vegetation. It was in one of these ravines that the specimen of *Amesia* was found while a Nature Study class from the Milwaukee State Teachers College was studying the vegetation of the slope.

The tree and shrub growth of that particular area is composed of *Crataegus*, *Rhus typhina* L., *Thuja occidentalis* L., *Fraxinus americana* L., and a few Austrian Pines (*Pinus nigra* Arnold). All but the latter are native. The Austrian Pines had apparently been transplanted there some fifteen to twenty years ago. The ground vegetation is entirely native, being largely *Solidago*, *Aster*, and *Osmorhiza longistylis* (Torr.) DC. The soil is hard clay.

Search was made in all the ravines of the park but no other specimens were found. As with *Pterospora*, it is impossible to say if the plant is indigenous or of recent, accidental introduction. Under the conditions where found, the latter seems more probable. However, it is true that any indigenous plant within the park, might have better chances of surviving due to the protection received, than if it were in the country near a large city. Gray's Manual of Botany, Seventh Edition, lists *Amesia* (as *Serapias Helleborine*) as having been found as far west as New York and Pennsylvania. The Wisconsin station thus extends the range of the species about five hundred miles farther west.

Identification of the specimens was verified by Mr. Albert M. Fuller, Assistant Curator of Botany of the Milwaukee Public Museum.

State Teachers College,
Milwaukee, Wisconsin.

POLLEN OF SPARGANIUM AMERICANUM AND S. ANDROCLADUM

Harry V. Truman

In connection with the pollen analysis of a peat bog situated in a kettle-hole in the glaciated area of Wisconsin it was found necessary to make a study of the pollen characteristics of certain species of *Sparganium.* Although no key has been prepared for the identification of the species of this genus, certain observed differences in the characteristics of the pollen of two of them, namely, *S. americanum* Nutt. and *S. androcladum* (Engelm.) Morong, are of interest because of the confusion that has existed in the past in regard to these species.

Fernald[1] identified *S. lucidum* Fernald & Eames with *S. androcladum* and noted that, while the species is abundant in Missouri and adjacent Illinois, it is otherwise unknown or unrecorded between the Mississippi valley and eastern Pennsylvania. Fassett[2] found two stations of the species, both in kettle-holes, in Wisconsin where it was hitherto unrecorded. Two specimens of *S. androcladum* were used in this study, one collected at Gibraltar Rock, Lodi, Wisconsin, Oct. 3, 1926, *Fassett & Wilson*, no. 2889, the other at West Roxbury, Massachusetts, *Forbes*, no. 17204. Specimens of *S. americanum* collected at Dundee, New York, *Wright*, New Bedford, Massachusetts, *Greene*, Lone Rock, Wisconsin, *Davis*, 1921, Spring Green, Wisconsin, *Davis*, 1922 and Haugen, Wisconsin, *Davis*, 1923 were used.

Sparganium pollens are thin-walled and collapsible. Sears[3] describes one of them ("*S. eurycarpum?*") as being spherical and monopored, with a thin, granular surface. The pollens of *S. androcladum* and *S. americanum* were found to differ from each other in the character of the granulation of the surface and in size. *S. androcladum* has a granular surface with a clean-cut outline throughout all, or at least the greater part, of its circumference. *S. americanum* shows a papillate surface which gives the outline of the grain much the appearance of a small-toothed cog-wheel, the intervals between the papillae being but slightly smaller than the diameter of the papillae. The pollen of *S. androcladum* averaged 28.4 mu. in diameter, that of *S. americanum* averaged 24.5 mu. Normal pollen grains were selected for measurement in each case (*i. e.*, badly collapsed or torn grains were not considered) and the measurements were made of the longest diameters where they were not exactly spherical.

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[1] Fernald, Rhodora **24**: 27 (1922).

[2] Fassett, Trans. Wis. Acad. Sci. Arts and Letters **25**: 186 (1930).

[3] Sears, Bot. Gaz. **89**: 95 (1930).

University of Wisconsin

A NEW SELENIA FROM THE EDWARDS PLATEAU OF TEXAS

V. L. Cory, Grazing Research Botanist

Selenia **Jonesii**, sp. nov., herba annua hiemans *prostrata* glabra, foliis petiolatis pinnatis bipinnatisve segmentis parvis oblongis, racemis folioso-bracteatis, floribus parvis luteis suaveolentibus, siliquis stipitatis ad 15 mm. longis, 10 mm. latis *subglobosis* vel ellipsoidalibus *inflatis* stylo breve crasso.

A prostrate, glabrous, winter annual from a slender tap-root; branches leafy and up to 15 cm. or more in length; leaves petioled, up to 5 cm. long, pinnately or bipinnately divided into small, oblong, obtuse or acute segments 1–3 mm. long, the terminal segment usually being longer than the others and, in growth, subjected to further lobing; petioles slender and elongated, narrowly winged, and extending into a mid-vein more widely winged; racemes leafy-bracted and frequently clustered at the crown of the plant, but occurring also along the spreading branches; flowers small, yellow, fragrant, 5–6 mm. long; sepals shorter and paler than the petals, up to 5 mm. long, spreading; petals yellow, oblanceolate, up to 6 mm. long, erect; pedicels slender, spreading or slightly ascending, 1–3 cm. long; siliques stalked, up to 15 mm. long and 10 mm. broad, subglobose to elliptical, inflated, surmounted by a broad style which is 3 mm. high and 2 mm. broad at the base; seeds 10 or more, 2-rowed in each cell, orbicular, broadly winged, 3.5 mm. wide by including the margin which adds slightly more than one mm. to the width of the seed.

This species differs from the other species of Selenia in its prostrate growth and in its shorter, broader, and inflated fruit. Also it differs from *Selenia aurea* Nutt. in its shorter and stouter style, and differs from *Selenia dissecta* Torr. in having flowers half or less than half as large. The inflation of the fruit, after the fashion of *Physaria*, marks it clearly as a distinct new species.

The first collections of this species were made March 20, 1929, at the headquarters of the W. R. Baggett Ranch, 3 miles north of Ozona, Texas, and the same day at the Six Mile Water-hole on Johnson Draw at about six miles north of Ozona, and also on Mr. Baggett's ranch. These collections were discarded, when better specimens were collected the next day at a water-hole on Howard Draw at about twelve miles above the Old Spanish Trail crossing of the Draw at about eighteen miles northwest of Ozona, the county-seat of Crockett County, Texas. The collections (Nos. 323 and 324) made on Howard Draw, March 21, 1929, were of plants in full flower, but without any fruit whatever. The *Selenia* had made excellent growth, and, at four water-holes in these two Draws, it grew abundantly in the mud and moist ground surrounding the water, while only a few plants of other species were present. As these plants were new to me and the fruit was lacking to permit certain placing in its proper genus, sheet No. 324 was sent to the Gray Herbarium. Through the kindness of Dr. Ivan M. Johnston a report was received that apparently the plant was a *Selenia,* but, if so, it was distinctly a new species. Postponement of further study was made until the plant could be collected in fruit.

In 1930 the late winter and early spring were exceptionally dry and all water-holes in Crockett County dried up, and thus it was that only a few rather unsatisfactory plants could be found on April 15th when fruiting specimens were obtained. These collections (Nos. 2992–3000, both inclusive) proved that the plant was really a *Selenia.* All were obtained at the Six Mile Water-hole in Johnson Draw. The type specimen, No. 2992, is deposited at the Herbarium of the Texas Agricultural Experiment Station at College Station, Texas. Collections Nos. 324 and 2993 are deposited at the Gray Herbarium, collection No. 2994 is deposited at the Missouri Botanical Gardens, and collection No. 2995 is deposited at the Field Museum of Natural History.

On the occasion of the collections of 1930 the writer was accompanied by the noted Western botanist, Prof. Marcus E. Jones of Pomona College, Claremont, California, who took the opportunity to make a series of collections of this plant. To commemorate his visit to the Edwards Plateau country of Texas and to express appreciation of the opportunity thus afforded to make his acquaintance and to gain his friendship it is our wish to name this species in his honor.

It appears probable that this species is confined to Crockett County, Texas, for the writer has not seen it at the water-holes in draws elsewhere in the Edwards Plateau or on further west in the Trans-Pecos area of the State; but a more thorough search is required before this may be accepted as a fact.

Grateful acknowledgement is made to Dr. Ivan M. Johnston and to Prof. Marcus E. Jones for advice and assistance given in the study of this species.

Texas Agricultural Experiment Station.

Drosera rotundifolia, var. comosa in Connecticut.—In the course of a morning's botanizing last August on a small floating bog at Donovan's Pond, Mansfield, Connecticut, I was hunting around in the sphagnum for pitcher-plant seedlings when I noticed a queer-looking sundew, whose reddish, capitate inflorescences were distinctly different from the elongate, white-flowered racemes of ordinary *Drosera rotundifolia*. The material was tentatively referred to *Drosera rotundifolia* L., var. *comosa* Fernald, an identification which I was recently able to confirm by examining specimens from the other known stations at the Gray Herbarium. The Connecticut plants do not show a transformation of the carpels or perianth into gland-bearing leaves, but the same may be said of several of the plants of the type collection. This peculiar variety has only once before been reported from New England (Mt. Desert, Maine, *Stebbins*), and is otherwise known only from Gaspé and from Central New York. My scanty collection, four plants in all, is in the College Herbarium.—G. S. Torrey, Connecticut Agricultural College.

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